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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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09/596,081

06/16/2000

Michael F. Brice

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41434

7590

03/07/2005

PATTON BOGGS LLP

2550 M STREET NW

WASHINGTON, DC 20037-1350

EXAMINER

GRAHAM, GARY K

ART UNIT

PAPER NUMBER

1744

DATE MAILED: 03/07/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/596,081

Applicant(s)

BRICE, MICHAEL F.

Examiner

Gary K Graham

Art Unit

1744

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 22 December 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 21-31 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 21-31 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>09142004</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 112

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claim 25 is rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor, at the time the application was filed, had possession of the claimed invention. There does not appear to be support for the handles being connected from their respective second ends to about the resilient thumb structure, thereby enabling a thumb to feel respective movement of said first and second elongated handles. The specification does not appear to discuss the range of the connection of the first and second handles. While the specification does discuss the bonding of the left and right handles together, there does not appear to be a discussion of the area of bonding. Clarification is requested.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 21, 23-25 and 27-31 rejected under 35 U.S.C. 103(a) as being unpatentable over Brice (US patent 5,499,421) in view of Desimone (US patent 5,339,482).

The patent to Brice discloses the invention substantially as is claimed. Note figures 10-13 which show a toothbrush including an elongated handle (61) comprised of left and right handle portions (61L,61R) joined together and shaped to be grasped by a user, a first and second neck (64L,64R) extending from an end of the handle and said necks supporting first and second bristle supports or head (66,67) at distal ends thereof. A plurality of first and second bristles extend from top surfaces of the respective heads. Said first and second bristles extend in the same direction and are substantially parallel to one another

The patent to Brice discloses all of the above recited subject matter with the exception of the handle portions having indentations on a top surface that extend to an inner edge that receive a resilient thumb contact structure therein when the portions are assembled together.

The patent to Desimone discloses a toothbrush (10) that includes non-slip rubber insert (22) centered with the width of the handle (16). The insert aids in gripping the toothbrush and is for engagement by the users thumb. The insert is provided within a cavity formed in the toothbrush handle. Note figure 6 wherein it shown that the cavity and the insert my have a plurality of different geometrical shapes (tapered walls, non-tapered walls).

It would have been obvious to one of skill in the art to provide the toothbrush of Brice with a rubber insert centered in the handle (61) for engagement by a users thumb, as clearly suggested by Desimone, to enhance gripping of the toothbrush.

With respect to claim 21, providing an insert in the toothbrush of Brice, as suggested by Desimone would provide the indentations in the handle portions (61L,61R) as claimed.

With respect to claim 25, it appears the modified toothbrush of Brice would be connected form the second ends to "about" where the thumb contact structure would be. Use of the term about allow for some leeway in location.

The "wherein" phrases set forth in claims 30 and 31 do not appear to define any structure not shown or suggested by the Brice patent. The first and second plurality of bristles of the Brice patent will have a stiffness and the first and second necks will have a resiliency, flexibility and bending resistance as is claimed. Defining that the resiliency, flexibility and bending resistance are set depending upon both brushing force and stiffness of bristles **such that the toothbrush adapts to a dento-gingival junction encountered during brushing to disrupt plaque** does not define any particular structure or structural relationships not set forth by the Brice patent. Such only relates to the desired functionality of the toothbrush.

Further, since the patent to Brice discloses all of the structure claimed, it appears it will inherently function as is claimed. Why would the toothbrush of Brice not adapt to disrupt plaque as is claimed? What is the physical difference between the toothbrush disclosed in the patent and that which is claimed? While features of an apparatus may be recited either structurally or functionally, claims directed to an apparatus must be distinguished from the prior art in terms of structure rather than function. (*In re Schreiber*, 128 F.3d 1473,1477-78,44 USPQ2d 1429,1431-32 (Fed. Cir. 1997)).

Claims 21 and 25-31 rejected under 35 U.S.C. 103(a) as being unpatentable over Brice (US patent 5,499,421) in view of Lamond et al (US patent 5,875,510).

The patent to Brice discloses the invention substantially as is claimed. Note figures 10-13 which show a toothbrush including an elongated handle (61) comprised of left and right handle portions (61L,61R) joined together and shaped to be grasped by a user, a first and second neck (64L,64R) extending from an end of the handle and said necks supporting first and second bristle supports or head (66,67) at distal ends thereof. A plurality of first and second bristles extend from top surfaces of the respective heads. Said first and second bristles extend in the same direction and are substantially parallel to one another

The patent to Brice discloses all of the above recited subject matter with the exception of the handle portions having indentations on a top surface that extend to an inner edge that receive a resilient thumb contact structure therein when the portions are assembled together.

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The patent to Lamond discloses a toothbrush (fig.1) including a handle (4) with an oval-shaped cavity (24) centered across the width thereof and an oval-shaped resilient pad (20) inserted into said cavity. Resilient pads, as disclosed by Lamond, are known to be provided with toothbrush handles to increase the grip of the user.

It would have been obvious to one of skill in the art to provide the handle of Brice with a cavity and a resilient pad centered across the width, as clearly suggested by Lamond, to increase the grip of the user of such toothbrush.

With respect to claim 21, providing an insert in the toothbrush of Brice, as suggested by Lamond would provide the indentations in the handle portions (61L,61R) as claimed.

The “wherein” phrases set forth in claims 30 and 31 do not appear to define any structure not shown or suggested by the Brice patent. The first and second plurality of bristles of the Brice patent will have a stiffness and the first and second necks will have a resiliency, flexibility and bending resistance as is claimed. Defining that the resiliency, flexibility and bending resistance are set depending upon both brushing force and stiffness of bristles **such that the toothbrush adapts to a dento-gingival junction encountered during brushing to disrupt plaque** does not define any particular structure or structural relationships not set forth by the Brice patent. Such only relates to the desired functionality of the toothbrush.

Further, since the patent to Brice discloses all of the structure claimed, it appears it will inherently function as is claimed. Why would the toothbrush of Brice not adapt to disrupt plaque as is claimed? What is the physical difference between the toothbrush disclosed in the patent and that which is claimed? While features of an apparatus may be recited either structurally or functionally, claims directed to an apparatus must be distinguished from the prior art in terms of structure rather than function. (*In re Schreiber*, 128 F.3d 1473,1477-78,44 USPQ2d 1429,1431-32 (Fed. Cir. 1997)).

Claim 22 is rejected under 35 U.S.C. 103(a) as being unpatentable over Brice (US patent 5,499,421) in view of Desimone et al (US patent 5,339,482) as applied to claim 21 above, and further in view of Beiny (GB patent 2,169,499).

The patents to Brice and Desimone disclose all of the above recited subject matter with the exception of a protrusion on the inside edge of one handle and a detent on the inside edge of the other handle for aligning the handles.

The patent to Beiny discloses a toothbrush (fig.3) wherein two handle members (14,15) are assembled together at straight portions (16). One of the handle members includes protrusions (18) on an inside edge of portion (16) which engage in detents (19) on the other handle member at an inside edge of portion (16).

It would have been obvious to one of skill in the art to provide protrusions and detents on the inside edges of the handles of the modified Brice brush, as clearly suggested by Beiny, to ease alignment of the handles during joining.

Response to Arguments

Applicant's arguments filed 22 December 2004 have been fully considered but they are not persuasive. Applicant argues that none of the references, alone or in combination, teach two elongated handles each having an indentation extending to an inside edge and defining a cavity when the edges are connected. Such is not persuasive. As discussed above, providing the toothbrush of Brice with a cavity to receive a thumb contact structure as taught by both Desimone and Lamond will result in the handle halves having the indentation as claimed. Whether the cavity is formed prior to joining of the handle halves or after they are joined, the end result would still have indentations in each half extending from the upper surface to an inner edge of the handle half as claimed.

Applicant's argument that combining Lamond, and presumably Desimone, with Brice would result in thumb contact structures in each handle half is not persuasive. The handle halves of Brice are joined together to make up the whole handle (16). The toothbrush of Brice is to be held in a normal manner where the entire handle (16) is grasp, not one of the handle portions. Therefore, providing a thumb contact structure in Brice, as suggested by Desimone or Lamond would result in a contact structure centered across the entire handle (16) and not centered on each handle half.

Applicant's argument with respect to the different geometric shapes for the indentations is noted, however, as set forth above, Desimone discloses different indentation shapes with a contact structure to match.

Applicant's discussion of support for the handle portions being joined from the second ends to about the thumb contact structure is noted but not persuasive. The protrusions shown in the drawings do not indicate a connection between the handle portions. The specification appears silent to the functioning of the protrusions. While the specification does discuss joining of the handle portions by welding or bonding there is no discussion of the particular range of connection and whether such joining stops near the thumb structure or not.

Conclusion

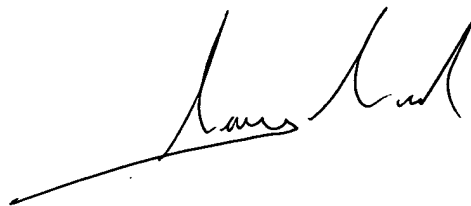
Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Gary K Graham whose telephone number is 571-272-1274. The examiner can normally be reached on Tuesday to Friday (6:30-4:00).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Kim can be reached on 571-272-1142. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

A handwritten signature in black ink, appearing to read 'Gary K Graham', is written over a horizontal line.

Gary K Graham
Primary Examiner
Art Unit 1744